Toshiba America Medical Systems, Inc.

510(k) Premarket Notification

1(100067

JAN 2 8 2010

Viamo (2.0) SSA-640A Ultrasound System

510(k) Summary

Submitter's Name:

Toshiba America Medical Systems, Inc.

Address:

2441 Michelle Drive, Tustin, CA 92780 Paul Biggins, Director Regulatory Affairs

Contact: Telephone No.:

(714) 730-5000

Device Proprietary Name:

VIAMO MODEL SSA-640A Version 2.0

Common Name:

Diagnostic Ultrasound System

Classification:

Regulatory Class: II Review Category: Tier II

Ultrasonic Pulsed Doppler Imaging System – Product Code: 90-IYN [Fed. Reg.No.: 892.1550]

Ultrasonic Pulsed Echo Imaging System - Product Code: 90-IYO

[Fed. Reg.No.: 892.1560]

Diagnostic Ultrasonic Transducer - Product Code: 90-ITX

[Fed. Reg. No.: 892.1570]

Identification of Predicate Devices:

Toshiba America Medical Systems believes that this device is substantially equivalent to:

- Toshiba Ultrasound Diagnostic System Viamo Model SSA-640 v1.2 510(k) K093171
- Toshiba Ultrasound Diagnostic System Aplio XG Model SSA-790A V4.0 510(k) K091295

Device Description:

The Viamo is a mobile system. It is a Track 3 device that employs a wide range of probes that include flat linear array, convex array and sector array with a frequency range of approximately 2.5 MHz to 12 MHz.

Intended Use:

The Viamo SSA-640 v2.0 Ultrasound System is indicated for the visualization of structures. characteristics, and dynamic processes with the human body using ultrasound and to provide image information for diagnosis in the following clinical applications: fetal, abdominal, pediatric, small organs, trans-vaginal neonatal cephalic, adult cephalic, cardiac, peripheral vascular, and musculoskeletal (both conventional and superficial).

Declaration of Conformity:

This device is designed and manufactured in conjunction with the Quality System Regulation, IEC 60601-1 (applicable portions), IEC 60601-1-1 (applicable portion), IEC 60601-1-2 (applicable portion), IEC 60601-1-4 (applicable portion), IEC60601-2-37 (applicable portions), IEC 62304 (applicable portion) and the AIUM-NEMA UD2 Output Measurement Standard as applied to Track 3 Ultrasound systems and the AIUM-NEMA UD3 Output Display Standard.

DEPARTMENT OF HEALTH & HUMAN SERVICES



Food and Drug Administration 10903 New Hampshire Avenue Document Mail Center - WO66-G609 Silver Spring, MD 20993-0002

JAN 2 8 2010

Toshiba America Medical Systems, Inc. % Mr. Mark Job Responsible Third Party Official Regulatory Technology Services LLC 1394 25th Street NW BUFFALO MN 55313

Re: K100067

Trade/Device Name: Viamo SSA-640 v2.0 Ultrasound System

Regulation Number: 21 CFR 892.1550

Regulation Name: Ultrasonic pulsed doppler imaging system

Regulatory Class: II

Product Code: IYO, IYN, and ITX

Dated: January 8, 2010 Received: January 11, 2010

Dear Mr. Job:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

This determination of substantial equivalence applies to the following transducers intended for use with the Viamo SSA-640 v2.0 Ultrasound System, as described in your premarket notification:

Transducer Model Number

<u>PLT-704AT</u>	<u>PVT-674BT</u>	PLT-704ST
<u>PVT-705BTH</u>	<u>PLT-1204BT</u>	PVT-375ST
<u>PVT-745BTV</u>	PVT-382BT	PST-25ST
<u>PVT-661VT</u>	PLT-805AT	<u></u>

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus permits your device to proceed to market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

If you have any questions regarding the content of this letter, please contact Paul Hardy at (301) 796-6542.

Sincerely yours,

Donald St. Pierre

Acting Director

Division of Radiological Devices Office of In Vitro Diagnostic Device

Evaluation and Safety

Center for Devices and Radiological Health

Enclosure(s)

Indications for Use

510(k) Number (if known): <u>K100</u> 6	<u>067</u>	
Device Name: Viamo SSA-640 v2.0	0 Ultrasound Syster	<u>n</u>
Indications for Use:		
information for diagnosis in the follow	s with the human bo ving clinical applica	I for the visualization of structures, ody using ultrasound and to provide image ations: fetal, abdominal, pediatric, small organs, peripheral vascular, and musculo-skeletal (both
<i>;</i>		-
•		
•		
	•	
·		
Prescription Use(Part 21 CFR 801 Subpart D)	AND/OR	Over-The-Counter Use(21 CFR 807 Subpart C)
(PLEASE DO NOT WRITE BELOW	/ THIS LINE-CON	TINUE ON ANOTHER PAGE IF NEEDED)
Concurrence of CDRH	l, Office of In Vita	o Diagnostic Devices (OIVD)
(Division Sign-Off) Division of Radiological Devices	17.	
510(k) Number <u>ドルさら</u> とつ		Page 1 of <u>13</u>

System:	Viamo v2.0 SSA-640A	
System:	<u>Viamo v2.0 SSA-640A</u>	

Transducer:

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mod	le of	Operati	on								
Specific (Tracks 3)	В	M	PWD	CWD		Combined (Specify) *	THI	Advanced Dynamic Flow	Power	CHI 2D	4D	Other [Note]
Ophthalmic	7	<u> </u>						1.00		<u> </u>		
Fetal	P	Р	P		P	2	P	N	P			3
Abdominal	P	P	P		P	2	P	N	P			
Intra-operative (Abdominal)							-	-:-	1			3
Intra-operative (Neuro)	1								_			
Laparoscopic						<u> </u>						<u> </u>
Pediatric	P	P	P	_	P	2	Р	N	P			_ _
Small Organ (Note 1)	P	P	P			2	P	N N	<u>P</u>			3
Neonatal Cephalic	P	P	P		P	2	- <u>-</u> -	N	P			3
Adult Cephalic	P	P	P		- <u>-</u> -	2	- <u>'</u>	N	P			3
Trans-rectal	1		┝∸┤	" 				- N				3
Trans-vaginal	N	N	N		N	2	N	N				
Trans-urethral	1		 `` -				-17	N	N			3
Trans-esoph. (non-Card.)				\dashv			—-					
Musculo-skeletal (Conventional)	P	P	P		P	2	P	N	P			3
Musculo-skeletal (Superficial)	P	P	P		P	2	P	N	P			3
Intravascular	\Box						<u> </u>					
Other (Specify)												 -
Cardiac Adult	P	P	P		P	2	P	N	P			3
Cardiac Pediatric	P	P	P		P	2	$\frac{\cdot}{P}$	N	P			3
Intravascular (Cardiac)							- 					
Frans-esoph. (Cardiac)	\sqcap							 +				
Intra-cardiac	1								·			
Other (Specify)	$\uparrow \neg \uparrow$			\dashv								-
Peripheral vessel	P	₽	P		P	2	P	N	P			3
Other (Specify)	H			 -					 -			

N = new indication; P = previously cleared by FDA; E = added under this appendix Previous 510(k): K093171

Note 1 Small organ includes thyroid, breast and testicle.

Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure: added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

510(k) Number_

Viamo v2,0 SSA-640A

Transducer: PST-25ST

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mo	de ot	Operati	ion								
Specific (Tracks 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	ТНІ	Advanced Dynamic Flow	Power	CHI 2D	4D	Other [Note
Ophthalmic .		\vdash						11011			<u> </u>	
Feta!			\vdash				<u> </u>	 				
Abdominal	P	P	P		P	2	P	N	P			
Intra-operative (Abdominal)	\top						- - -	 '` 	- Г			3
Intra-operative (Neuro)								 				 -
Laparoscopic		\vdash						 				<u> </u>
Pediatric	P	P	P		P	2	P	N	P			
Small Organ (Note 1)	1	_						- N	P			3
Neonatal Cephalic	P	P	P	$\neg \neg$		2	P	N				<u> </u>
Adult Cephalic	P	Р	P		P	2		N	<u>Р</u>			3
Trans-rectal									P			3
Trans-vaginal	1			\neg								
Trans-urethral		_										
Trans-esoph. (non-Card.)												
Musculo-skeletal (Conventional)										$\neg \dagger$		
Musculo-skeletal (Superficial)									- -			
Intravascular												
Other (Specify)			·	$\overline{}$								
Cardiac Adult	Р	Р	P		P	2	P	N	P			
Cardiac Pediatric	Р	P	P		P	2	P	N	P	- +		3
Intravascular (Cardiac)					_ `-		1	- 18	r			3
Trans-esoph. (Cardiac)		\neg										
Intra-cardiac						+			 			
Other (Specify)			\neg									
Peripheral vessel												
Other (Specify)			$\neg +$									

N = new indication; P = previously cleared by FDA; E = added under this appendix Previous 510(k) of the transducer: K093171

Note 1 Small organ includes thyroid, breast and testicle. Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure : added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

510(k) Number <u>R100067</u>

System: Viamo v2.0 SSA-640A

Transducer: PVT-375ST

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation											
Specific (Tracks 3)	В	М	PWD	CWD	Color Doppler	Combined (Specify)	THI	Advanced Dynamic Flow	Power	CHI 2D	3D	Other [Note]
Ophthalmic					_							
Fetal	P	P	Р		P	2	P	N	P	-		3
Abdominal	P	P	P		P	2	P	N	P			3
Intra-operative (Abdominal)	-		-	_				 `` 				
Intra-operative (Neuro)								<u> </u>				
Laparoscopic		•										
Pediatric	P	P	P		P	2	P	N	P			3
Small Organ (Specify) (1)							<u> </u>			-		3
Neonatal Cephalic						-						
Adult Cephalic												
Trans-rectal												
Trans-vaginal										-		
Trans-urethral	\top											<u> </u>
Trans-esoph. (non-Card.)												
Musculo-skeletal (Conventional)												
Musculo-skeletal (Superficial)	7				,							
Intravascular						- 	\neg					
Other (Specify)	1											 ,
Cardiac Adult										-		
Cardiac Pediatric		•		$\neg \uparrow$								
Intravascular (Cardiac)												
Frans-esoph. (Cardiac)	\Box						\dashv		_	 		
Intra-cardiac												
Other (Specify)												
Peripheral vessel					-						7	
Other (Specify)	+							 				

N = new indication; P = previously cleared by FDA; E = added under this appendix Previous 510(k) of the transducer: K093171

Note 1 Small organ includes thyroid, breast and testicle.

Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure: added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

510(k) Number <u>K108617</u>

System: Viamo v4.0 SSA-640A

Transducer: PLT-704ST

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mod		Operat									
Specific (Tracks 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	тні	Advanced Dynamic Flow	Power	CHI 2D	3D	Other [Note]
Ophthalmic		\sqcap			-			7.07		<u>-</u>		
Fetal	7							 -i		-		
Abdominal	7-					-				┝╌╎		
Intra-operative (Abdominal)	┰╴								 -			
Intra-operative (Neuro)												
Laparoscopic	1											<u> </u>
Pediatric												
Small Organ (Specify) (1)	P	P	P		P	2	Р .	N	P			3
Neonatal Cephalic			 			- <u>-</u> -	<u> </u>					
Adult Cephalic												
Trans-rectal												
Trans-vaginal		_		_			_			-		
Trans-urethral					·							
Trans-esoph. (non-Card.)		_										
Musculo-skeletal (Conventional)	P	P	P		P	2	Р	N	P			3
Musculo-skeletal (Superficial)	Р	P	P		P	2	- P	N	—- <u>-</u> -			
Intravascular							÷	- 17				
Other (Specify)												
Cardiac Adult	1											
Cardiac Pediatric				\neg								
Intravascular (Cardiac)												
Trans-esoph. (Cardiac)												<u> </u>
Intra-cardiac			$\neg \neg$						~ -			
Other (Specify)												
Peripheral vessel	P	P	P		P	2	P	N				
Other (Specify)	1	\neg		$\overline{}$		 -			Г			3

N = new indication; P = previously cleared by FDA; E = added under this appendixPrevious 510(k) of the transducer: K093171

Note 1 Small organ includes thyroid, breast and testicle.

Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure: added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

System: Viamo v2.0 SSA-640A
Transducer: PLT-805AT

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mod	le of	Operati	ion								
Specific (Tracks 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	ТНІ	Advanced Dynamic Flow	Power	CHI 2D	3D	Other [Note]
Ophthalmic	\top							11011		-		
Fetal	1					<u> </u>				<u> </u>		├
Abdominal				_			_					ļ
Intra-operative (Abdominal)	1							-				├
Intra-operative (Neuro)								 		-		
Laparoscopic										<u> </u>		 -
Pediatric												
Small Organ (Specify) (1)	P	P	P		P	2	P	N	P			3
Neonatal Cephalic	$ au^-$								1			3
Adult Cephalic												
Trans-rectal				~								
Trans-vaginal		_								-	-	
Trans-urethral												
Trans-esoph. (non-Card.)						-		- 				
Musculo-skeletai (Conventional)	P	P	P		P	2	P	N	P	_		3
Musculo-skeletal (Superficial)	P	P	Р		P	2	P	N	P	-		3
Intravascular			-				-					
Other (Specify)												
Cardiac Adult												
Cardiac Pediatric					_			 	 :			
Intravascular (Cardiac)	T					· · · · · ·						
Trans-esoph. (Cardiac)					-			 				
Intra-cardiac						<u> </u>		 		 		
Other (Specify)												
Peripheral vessel	P	Р	P	T	P	2	P	N	P			3
Other (Specify)	1 1						-			 -		- '-

N = new indication; P = previously cleared by FDA; E = added under this appendix Previous 510(k) of the transducer; K093171

Note 1	Small	organ	includes	thyroid.	breast	and	testicle

Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure: added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

510(k) Number *16006フ

System:

Viamo v2.0 SSA-640A

Transducer:

PVT-382BT

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mod	Mode of Operation											
Specific (Tracks 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	ТНІ	Advanced Dynamic Flow	Power	CHI 2D	3D	Other [Note	
Ophthalmic	7							110		├			
Fetal	P	P	P		P	2	P	N	. P	 		3	
Abdominal	P	P	P		P	2	P	N	P	<u> </u>	٠	3	
Intra-operative (Abdominal)	 						<u> </u>	 `` -		 			
Intra-operative (Neuro)													
Laparoscopic							-	 					
Pediatric	P	P	P		P	2	P	N	P			3	
Small Organ (Specify) (1)	Ť.,	-						-17					
Neonatal Cephalic	1					t				-	-	ļ	
Adult Cephalic									,		-		
Trans-rectal	†					 							
Trans-vaginal	_	-											
Trans-urethral	1					 							
Trans-esoph. (non-Card.)						-						·	
Musculo-skeletal (Conventional)													
Musculo-skeletal (Superficial)	1.												
Intravascular	1												
Other (Specify)	1							-				-	
Cardiac Adult													
Cardiac Pediatric	1												
Intravascular (Cardiac)								-					
Trans-esoph. (Cardiac)	$\uparrow \neg \uparrow$				·			 		<u> </u>			
Intra-cardiac	† †												
Other (Specify)	1							 		-			
Peripheral vessel	·						_						
Other (Specify)													

N = new indication; P = previously cleared by FDA; E = added under this appendi	Y
Previous 510(k) of the transducer: K091371	

Note 1 Small organ includes thyroid, breast and testicle.

Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure : added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

510(k) Number K1088 47

 System:
 Viamo v2.0 SSA-640A

 Transducer:
 PLT-1204BT

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mo	de of	Operati	ion								
Specific (Tracks 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	ТНІ	Advanced Dynamic Flow	Power	CHI 2D	3D	Other [Note
Ophthalmic	1	1					<u> </u>	Flow	 -			
Fetal	\top	 	├			 		 -				<u> </u>
Abdominal	_				-							<u> </u>
Intra-operative (Abdominal)	+	 	 		·							
Intra-operative (Neuro)	_	<u> </u>										
Laparoscopic	1											
Pediatric	†-	<u> </u>		-		-				-		
Small Organ (Specify) (1)	P	P	P		P	2		N				
Neonatal Cephalic	 	-			 -	4	r	N	<u> </u>			3
Adult Cephalic	-											
Trans-rectal	 		\vdash			+						
Trans-vaginal	†		\vdash									
Trans-urethral	1											
Trans-esoph. (non-Card.)	†-											
Musculo-skeletal (Conventional)												
Musculo-skeletal (Superficial)						 -				 		
Intravascular												
Other (Specify)		-				·			——			
Cardiac Adult												
Cardiac Pediatric				$\overline{}$	-							
Intravascular (Cardiac)												
Trans-esoph. (Cardiac)												
Intra-cardiac	1 1		-+	$\neg \neg$	——							
Other (Specify)	 											
Peripheral vessel	P	P	P		P	2	P	N	P			3
Other (Specify)		\dashv		_								

N = new indication; P = previously cleared by FDA; E = added under this appendix Previous 510(k) of the transducer: K091295

Note 1 Small organ includes thyroid, breast and testicle. Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure: added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

510(k) Number K1000 67

Viamo v2.0 SSA-640A

Transducer: PVT-674BT

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation												
Specific (Tracks 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	ТНІ	Advanced Dynamic Flow	Power	CHI 2D	3D	Othe [Note	
Ophthalmic	\top		\top			 	-	Flow					
Fetal	P	P	P		P	2	P	N	P				
Abdominal	P	P	P		P	2	- <u>-</u> -	N	P			3	
Intra-operative (Abdominal)	1-						. 1	18	_ P			3	
Intra-operative (Neuro)		_				 - 							
Laparoscopic	 												
Pediatric	P	P	P		P	2	P	N					
Small Organ (Specify) (1)				_			- г	N	P			3	
Neonatal Cephalic	+					———							
Adult Cephalic	1-1												
Trans-rectal													
Trans-vaginal	1-1						_						
Trans-urethral	1												
Trans-esoph (non-Card.)													
Musculo-skeletal (Conventional)								-		_		-	
Musculo-skeletal (Superficial)	1			_									
Intravascular			$\neg \dashv$										
Other (Specify)						+						 .	
Cardiac Adult													
Cardiac Pediatric										-			
Intravascular (Cardiac)	1 1	\neg		$\overline{}$									
Frans-esoph. (Cardiac)	1 1		_	$\neg \dashv$					——				
ntra-cardiac		┪			 -				 				
Other (Specify)		_											
Peripheral vessel		\neg		$\neg +$									
•] .										ļ		
Other (Specify)	╀	\dashv				·							

N = new indication; P = previously cleared by FDA; E = added under this appendix Previous 510(k) of the transducer: K091295

Note I Small organ includes thyroid, breast and testicle.

Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure : added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

System:

Viamo v2.0 SSA-640A

Transducer:

PVT-661VT

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	_		Operat									
Specific (Tracks 3)	В	М	PWD	CWD	Color Doppler	Combined (Specify)	ТНІ	Advanced Dynamic Flow	Power	CHI 2D	3D	Other [Note
Ophthalmic	 							FIUW				
Fetal						<u> </u>		 -			 -	├ ──
Abdominal	 											ļ
Intra-operative (Abdominal)	1								·	<u> </u>		<u> </u>
Intra-operative (Neuro)	╁┈			_					~			
Laparoscopic		_										<u> </u>
Pediatric												<u> </u>
Small Organ (Specify) (1)										-		<u> </u>
Neonatal Cephalic						<u> </u>						
Adult Cephalic											-	
Trans-rectal	† T											
Trans-vaginal	N	N	N		N	2	Ñ	N				
Trans-urethral							14	N	N			3
Trans-esoph. (non-Card.)	1											
Musculo-skeletal (Conventional)												
Musculo-skeletal (Superficial)												
Intravascular ·	\Box											
Other (Specify)	\Box											
Cardiac Adult					╤							
Cardiac Pediatric	\Box		$\neg \neg$	T			$\neg \dashv$				-	
Intravascular (Cardiac)												
Trans-esoph. (Cardiac)												
ntra-cardiac										- 		·
Other (Specify)												
Peripheral vessel												<u> </u>
Other (Specify)	┞╌┤	\dashv										<u> </u>

N = new indication; P = previously cleared by FDA; E = added under this appendix Previous 510(k) of the transducer: K091295

Note 1 Small organ includes thyroid, breast and testicle.

Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure : added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

System: _

Viamo v2.0 SSA-640A

Transducer:___

PVT-745BTV

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application Specific	_		Operat				,	,				
(Tracks 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	ТНІ	Advanced Dynamic Flow	Power	CHI 2D	3D	Other [Note]
Ophthalmic												
Fetal	T											
Abdominal	P	P	P		P	2	P	N	P			3
Intra-operative (Abdominal)												
Intra-operative (Neuro)	1											
Laparoscopic	1											
Pediatric			_		T 100 11							
Small Organ (Specify) (1)	1							 				
Neonatal Cephalic	1											<u> </u>
Adult Cephalic									 -	-		
Trans-rectal	1					<u> </u>		 				
Trans-vaginal					-					<u> </u>		
Trans-urethral					-		_					l
Trans-esoph. (non-Card.)										<u> </u>		
Musculo-skeletal (Conventional)							-					
Musculo-skeletal (Superficial)		_			-							
Intravascular												
Other (Specify)	1											
Cardiac Adult					-							
Cardiac Pediatric												
Intravascular (Cardiac)					_				-	-	-	
Trans-esoph. (Cardiac)	T	-						 				
Intra-cardiac												
Other (Specify)			- :									
Peripheral vessel	P	P	P		P	2	P	N	P			3
Other (Specify)									·			 -

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Note 1 Small organ includes thyroid, breast and testicle.

Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure: added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

510(k) Number <u>K100067</u>

System:

Viamo v2.0 SSA-640A

Transducer:__

PVT-705BTH

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation											
Specific (Tracks 3)	В	M	PWD	CWD	Color Doppler	Combined (Specify)	THI	Advanced Dynamic Flow	Power	CHI 2D	3D	Other [Note
Ophthalmic								11011		\vdash		
Fetal					**					\vdash		
Abdominal	P	P	P		P	2	P	N	P			3
Intra-operative (Abdominal)	7 -			<u> </u>								-3
Intra-operative (Neuro)	1					<u> </u>	_	 				
Laparoscopic								 				
Pediatric				-								<u> </u>
Small Organ (Specify) (1)			1		 -	 						 -
Neonatal Cephalic			1									
Adult Cephalic			-	_							-	
Trans-rectal				_		 						<u> </u>
Trans-vaginal	1		· -									
Trans-urethral												
Trans-esoph. (non-Card.)												
Musculo-skeletal (Conventional)					-					-		<u></u>
Musculo-skeletal (Superficial)										_		
Intravascular									_	-		
Other (Specify)				$\neg \dashv$								
Cardiac Adult										_		
Cardiac Pediatric						-						
Intravascular (Cardiac)			\vdash \vdash \vdash									
Trans-esoph. (Cardiac)		_										
Intra-cardiac	1	-				-				-		
Other (Specify)										- 		
Peripheral vessel		-	-		<u> </u>							<u></u>
Other (Specify)	┤┤					<u>. </u>	-				<u> </u>	· ·

N = new indication; P = previously cleared by FDA; E = added under this appendix Previous 510(k) of the transducer: K091295

Note I Small organ includes thyroid, breast and testicle.

Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure : added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

510(k) Number <u>K1866 L7</u>

System: Viamo v2.0 SSA-640A
Transducer: PLT-704AT

Intended Use: Diagnostic ultrasound imaging or fluid flow analysis of the human body as follows:

Clinical Application	Mode of Operation											
Specific (Tracks 3)	В	М	PWD	CWD	Color Doppler	Combined (Specify)	ТНІ	Advanced Dynamic Flow	Power	CHI 2D	3D	Other [Note]
Ophthalmic								11011		 		
Fetal	7			i —						_		
Abdominal	7 -									 		 -
Intra-operative (Abdominal)										-		
Intra-operative (Neuro)	1-		<u> </u>	_					_			
Laparoscopic								-		 		
Pediatric					·			├	 -	l		 -
Small Organ (Specify) (1)	P	P	P		P	2	P	N	P		_	3
Neonatal Cephalic								- 11				
Adult Cephalic	1			_					 -			<u> </u>
Trans-rectal	1						· 			<u> </u>		
Trans-vaginal								-				<u> </u>
Trans-urethral									·	_		 -
Trans-esoph. (non-Card.)											-	
Musculo-skeletal (Conventional)						 ·	.=-					
Musculo-skeletal (Superficial)	<u> </u>		 			·		<u> </u>				
Intravascular				_								
Other (Specify)									· · · · · · · · · · · · · · · · · · ·			 -
Cardiac Adult												
Cardiac Pediatric	1 -											-
Intravascular (Cardiac)					· · · · · · · · · · · · · · · · · · ·	٠						
Trans-esoph. (Cardiac)				$\neg \uparrow$		·		 				
Intra-cardiac										 		
Other (Specify)					,					- 		
Peripheral vessel	P	P	P		P	2	P	N	P			3
Other (Specify)												

N = new indication; P = previously cleared by FDA; E = added under this appendix Previous 510(k) of the transducer: K091295

Note 1 Small organ includes thyroid, breast and testicle.

Note 2 Combined mode includes B/M; B/PWD; BDF/PWD; BDF/MDF; BDF/MDF/PWD

Note 3 ApliPure: added under this submission

Prescription Use Only (Per 21 CRF801.109)

(Division Sign-Off)

Division of Radiological Devices

510(k) Number K12067